

NASA TECH BRIEF

Marshall Space Flight Center



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Graphics Shadowing Analysis

The problem:

It was necessary to investigate the local shadowing phenomena on the solar Skylab vehicle.

The solution:

The investigation led to the development of a graphic display of the solar Skylab vehicle on a cathode-ray tube (CRT) screen which is generated by a program that produces shadows corresponding to the solar shadows.

How it's done:

The visual image that is generated on a CRT screen is to scale and is constructed according to the dimensions of the specified craft. Once displayed, the image may be manipulated by several different means.

The image itself can consist of: (a) the multiple-docking adapter (MDA); (b) the active portions of the two solar array panels and the aft surfaces of their beam supports; (c) the Apollo Telescope Mount (ATM) solar panels; (d) the docked Command Service Module (CSM); or (e) the lower surface of the ATM support,

which appears as a visual aid between the ATM panels and the MDA.

Notes:

1. This program was written in FORTRAN IV (64%) and ASSEMBLER (36%) for use on the IBM 360/370 computer with the IBM 2250 graphic display.
2. Inquiries concerning this program should be directed to:

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Source: S. R. Hayes of
McDonnell Douglas Astronautics Co.
under contract to
Marshall Space Flight Center
(MFS-21406)